HAM # 830019 PATENT

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-13 (canceled).

Claim 14 (new). A composition comprising at least two separate reactive components that when mixed together form a reactive resin that undergoes curing wherein at least two of the separate reactive components each includes a nanoscale platelet filler dispersed in the reactive component.

Claim 15 (new). The composition according to claim 14 wherein the viscosity of the reactive resin is higher than the viscosity of each of the at least two separate reactive components.

Claim 16 (new). The composition according to claim 14 wherein the nanoscale platelet filler has a thickness of less than 5 micron.

Claim 17 (new). The composition according to claim 16 wherein the nanoscale platelet filler has a thickness of less than 1 micron.

Claim 18 (new). The composition according to claim 14 wherein the nanoscale platelet filler has an aspect ratio higher than 10.

Claim 19 (new). The composition according to claim 14 wherein the nanoscale platelet filler is selected from the group consisting of: a modified nanoclay; an unmodified nanoclay; a nanocomposite containing a modified nanoclay a nanocomposite containing an unmodified nanoclay: mica; and glass flakes.

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Claim 20 (new). The composition according to claim 14 wherein the nanoscale platelet filler is a modified nanoclay having ammonium ions on the surface.

Claim 21 (new). The composition according to claim 14 wherein the nanoscale platelet filler is present in each reactive component at an amount of 0.5 to 10% by weight based on the total weight of the reactive component.

Claim 22 (new). The composition according to claim 14 wherein the reactive resin is selected from the group consisting of: an epoxy and an amine; an epoxy, an acrylic and an amine; an isocyanate and a polyol; an epoxy, an isocyanate, a polyol and an amine; an epoxy and an anhydride; and a cyclocarbonate, an epoxy and an amine.

Claim 23 (new). The composition according to claim 14 wherein the viscosity of each of the reactive components is less than 300,000 Pa s and the viscosity of the reactive resin immediately after thorough mixing of the reactive components exceeds 500,000 Pa s.

Claim 24 (new). The composition according to claim 14 which further includes a filler that interacts with the nanoscale platelet filler.

Claim 25 (new). The composition according to claim 24 wherein the filler is calcium carbonate, aluminum trihydrate, talc, and/or silica.

Claim 26 (new). A composition comprising at least two reactive components that when mixed together form a reactive resin that undergoes curing wherein one reactive component comprises:

30-80% by weight of an epoxy resin;

0.5-5% by weight of a nanoscale platelet filler having ammonium ions on the surface;

5-40% by weight of a filler that interacts with the nanoscale platelet filler; and 0-50% by weight of an inert filler;

and one other reactive component comprises:

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30-70% by weight of an amine hardener;

0.5-5% by weight of a nanoscale platelet filler having ammonium ions on the surface;

5-40% by weight of a filler that interacts with the nanoscale platelet filler; and 0-60% by weight of an inert filler.

Claim 27 (new). A process for making a model comprising the steps of:

- (a) applying a modeling paste to a structure, the modeling paste being formed by mixing two or more separate reactive components wherein at least two of the reactive components each includes a nanoscale platelet filler dispersed in the reactive component:
- (b) curing the modeling paste in a continuous layer to form the model; and
- (c) optionally machining the cured layer to a desired contour.

Claim 28 (new). A model produced according to the process of claim 27.